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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,269	09/07/2004	Pijush K. Dewanjee	PU2243	5268
23454	7590	07/20/2006		EXAMINER
CALLAWAY GOLF COMPANY 2180 RUTHERFORD ROAD CARLSBAD, CA 92008-7328				BUTTNER, DAVID J
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/711,269	DEWANJEE, PIJUSH K.
	Examiner	Art Unit
	David Buttner	1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-7 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/1/06</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

The application data sheet is inconsistent with the parent applications listed at the beginning of the specification. 10-063978 is not a parent.

Applicant must update the status of the parent applications at the beginning of the specification.

The phrase "liquid aromatic diamine" does not have basis in either parent. The polyester of claim 4 does not have basis in the parents. The effective filing date for the claims is 9/7/04.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The nomenclature of applicant's methylenebis-(2,6-diethyl)-aniline is believed improper. The last parenthesis should follow "aniline" because there are two aniline groups present for the curing agent used by applicant (LONZACURE M-DEA paragraph 30 of spec). This is confirmed by Wu '261 (col 7 line 42) and Rosenberg 2003/0203771.

"nitrogen-carbon-oxygen" is not accurate description of an isocyanate group in claims 3-6. Isocyanate has double bonds between the nitrogen and carbon, and between the carbon and oxygen. "-NCO" would be a recognized depiction of an isocyanate group.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 rejected under 35 U.S.C. 102(b,e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wu '261.

Wu suggests urethane covered golf balls (abstract). The urethane is made from a urethane prepolymer and a curative. The prepolymer can be based on a polyester (col 20 line 46) or polyether such as PTMEG or polyoxypropylene glycol (col 20 line 60) and a diisocyanate such as toluene diisocyanate (col 19 line 67). The curative can be methylene bis(diethylaniline) (col 22 line 1), bis (sec-butylamino)benzene (col 21 line 61), and mixtures thereof (col 22 line 5). The prepolymer has 2.5-7.5% unreacted isocyanate groups (col 7 line 59).

An ionomeric inner cover can be present (table 5). The cover is 0.02-0.04" thick (col 18 line 15) and has a shore D hardness of 30-60 (col 26 line 18). The overall ball compression is 60-100 (col 24 line 60). Even if the number of choices for curing agent, polyether, isocyanate etc are too numerous to justify anticipation, any combination of listed elements would have been *prima facie* obvious.

Claims 1- 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Wu '261.

Wu suggests mixtures of diamine curatives, but does not provide relative amounts thereof.

Any mixing ratio would have been *prima facie* obvious.

Claims 1-5 and 7 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Voorheis 2003/0064826.

Voorheis suggests urethane covered golf balls (abstract). The urethane is made from a urethane prepolymer and a curative (paragraph 63). The prepolymer can be based on a polyether such as polyester polyol, PTMEG or polyoxypropylene glycol (paragraph 50) and a diisocyanate such as toluene diisocyanate (paragraph 48).

The curative can be MDEA, bis (sec-butylamino)benzene and mixtures thereof (paragraph 54). Aliphatic diamines can also be used (paragraph 60).

An ionomeric inner cover can be present (paragraph 29) with a Shore D of 50-65 (paragraph 76). The cover is 0.02-0.04" thick (paragraph 28) and has a shore D hardness of 30-40 (paragraph 76). The core has a compression of 50-70 (paragraph 78). Even if the number of choices for curing agent, polyether, isocyanate etc are too

numerous to justify anticipation, any combination of listed elements would have been *prima facie* obvious.

Claims 1-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Voorheis 2003/0064826.

Voorheis suggests mixtures of diamine curatives, but does not provide relative amounts thereof.

Any mixing ratio would have been *prima facie* obvious.

Claims 1-5 and 7 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cavallaro 2003/0171166.

Cavallaro suggests urethane covered golf balls (abstract). The urethane is made from a urethane prepolymer and a curative (paragraph 65). The prepolymer can be based on a polyether such as polyester polyol, PTMEG or polyoxypropylene glycol (paragraph 58) and a diisocyanate such as toluene diisocyanate (paragraph 56). The curative can be MDEA, bis (sec-butylamino)benzene and mixtures thereof (paragraph 62).

An ionomeric inner cover can be present (paragraph 29) with a Shore D of 50-65 (paragraph 79). The cover is 0.02-0.04" thick (paragraph 41) and has a shore D hardness of 30-40 (paragraph 79). The core has a compression of 50-70 (paragraph 82). Even if the number of choices for curing agent, polyether, isocyanate etc are too numerous to justify anticipation, any combination of listed elements would have been *prima facie* obvious.

Claims 1-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Cavallaro 2003/0171166.

Cavallaro suggests mixtures of diamine curatives, but does not provide relative amounts thereof.

Any mixing ratio would have been *prima facie* obvious.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Wu '261 or Voorheis 2003/0064826 or Cavallaro 2003/0171166 in view of Isaac '568 or Peter '313.

Wu, Voorheis and Cavallaro suggest the use of more than one curing agent, but do not give any reasons for doing so.

Peter (col. 10 line 25-32) teaches such combinations allow for a variation in hardness of the final polyurethane. Isaac (col 2 line 23-30; col 1 line 51-60) teaches such a combination allows for a partial cure to form half shells (due to the faster curative) and a final cure to bond the half shells together (due to the slower curative).

It would have been obvious to utilize two curing agents of different hardnesses to obtain an "in between" hardness not possible with a single curative.

Alternatively it would have been obvious to pair a "slower" curing agent with a "faster" curing agent to allow for multiple molding steps.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 and 5-7 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 6787626. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims golf ball covers of urethane prepolymer cured with methylene bis(diethyl aniline) and a second curative.

Applicant should note claim 6 of patent 6787626 does not accurately reflect the examiner's amendment made during the prosecution.

Claims 1,2,5 and 6 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6762273. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims golf ball covers of urethane prepolymer cured with methylene bis(diethyl aniline) and a second curative.

Claims 1,2 and 5-7 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 10-904641. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application also

claims golf ball covers of urethane prepolymer cured with methylene bis(diethyl aniline) and a second curative.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

7/14/06

DAVID J. BUTTNER
PRIMARY EXAMINER
David Buttner